

ABSTRACT

The present invention provides [[a]] methods and compositions for altering a B cell mediated malignancy pathology in a patient. These methods comprise This methods comprises administering a composition comprising at least one [[and/]] or two chimeric proteins. Each chimeric protein comprises at least a portion of either the V_H or V_L region of the Id protein of the B cells associated with the a-immunoglobulin molecule from particular B cells from a patient having a B cell mediated malignancy pathology, and an immunoglobulin constant region. The genes encoding V_H or V_L regions and the genes encoding immunoglobulin constant regions are isolated and inserted into an expression vector encoding immunoglobulin constant regions. The chimeric proteins are expressed in produced by introducing the expression vectors into insect cell lines. The purified chimeric proteins are purified using antibody affinity columns, and then chemically conjugated to an immunogenic carrier protein keyhole limpet hemocyanin (KLH). Since the The conjugates comprising the comprise chimeric Id protein(s) are proteins made specifically from particular B cells from a patient having B cell mediated pathology, when it is administered to such a patient, with or without a cytokine such as granulocyte-macrophage-CSF, or [[a]] chemokine, the chimeric protein it can induces immune responses to alter the such a B cell mediated malignancy pathology.